

Best Management Practices for Construction and Development Projects Plains Topminnow

Fundulus sciadicus

Common name • Plains Topminnow Scientific name • Fundulus sciadicus Federal status • None State status • None

Purpose and Use

The information in this document is to be used to help avoid and minimize species impacts due to construction practices. It is not intended to be used as a guide to manage habitat for a given species. If that is the goal, please contact the Department of Conservation for habitat management information. Because every project and location differs, following the recommendations within this document does not ensure that impacts will not occur to the species and additional information might be required in certain instances. Following the recommendations within this document does not complete Endangered Species Act consultation that may be necessary for species listed under the federal Endangered Species Act; please contact the U.S. Fish and Wildlife Service for more information.

Ecology

Plains Topminnow historically is endemic to the central United States with two disjunct populations. The largest distribution is centered in Nebraska and extends to northeastern Colorado, southwestern Wyoming, southern South Dakota, southwestern Minnesota and lowa. The second population is centered in Missouri and extends from Kansas south to Oklahoma. In Missouri, Plains Topminnow historically occurred in the Missouri and middle Mississippi rivers and the lower reaches of tributaries to the Missouri River. It penetrated the lower reaches of western tributaries of the Missouri River and the Chariton River eastward. The Plains Topminnow was the most abundant minnow in the upper Missouri River but underwent a gradual decline in abundance downstream. It was uncommon in the lower Mississippi. They predominate in river channels where there is a sandy bottom and some current. The Plains Topminnow feeds primarily on algae and other organic matter sorted from bottom ooze. They spawn over an extended period from April into August. Adult Plains Topminnows reach a length of 3 to 5 inches.

Reason for Decline

Throughout much of their range, Plains Topminnow is fairly common. In Missouri, stream alteration, degradation of habitat, loss of stream connectivity and the introduction and spread of non-native species are all causes for its decline.

Specific Recommendations

Re-colonization by Plains Topminnow in prairie streams is directly affected by barriers such as dams and improperly constructed culverts; these should be avoided in its range, as well as state wide to improve aquatic organism passage (AOP).

- Avoid altering stream flow by adding to or building up low water crossings within its range.
- Bridge replacements should be designed with aquatic organism passage in mind and allow for bottomless box culverts.
- Impoundments within the Plains Topminnow range should be avoided or designed to contain predatory fish.
- Healthy stream corridors should be established or maintained to minimize stream bank erosion.

General Recommendations

Refer to Management Recommendations for Construction Projects Affecting Missouri Streams and Rivers.

If your project involves the use of Federal Highway Administration transportation funds, these recommendations may not fulfill all contract requirements. Please contact the Missouri Department of Transportation at 573-526-4778 or www.modot.mo.gov/ehp/index.htm for additional information on recommendations.

Information Contacts

For further information regarding regulations for development in rivers, streams and wetlands, contact:

For species information:

Missouri Department of Conservation

Resource Science Division
P.O. Box 180
2901 W. Truman Blvd
Jefferson City, MO 65102-0180
Telephone: 573/751-4115

For species information and Endangered Species Act Coordination:

U.S. Fish and Wildlife Service
Ecological Services
101 Park Deville Drive, Suite A
Columbia, MO 65203-0007
Telephone: 573/234-2132

For Clean Water Act Coordination:

Missouri Department of Natural Resources

Water Protection Program
P.O. Box 176
Jefferson City, MO 65102-0176
Telephone: 573/751-1300, 800/361-4827

U.S. Army Corps of Engineers

Regulatory Branch 700 Federal Building Kansas City, MO 64106-2896 Telephone: 816/983-3990

U.S. Environmental Protection Agency

Water, Wetlands, and Pesticides Division 901 North 5th Street Kansas City, KS 66101 Telephone: 913/551-7307

Disclaimer

These Best Management Practices were prepared by the Missouri Department of Conservation with assistance from state and federal agencies, contractors and others to provide guidance to those people who wish to voluntarily act to protect wildlife and habitat. Compliance with these Best Management Practices is not required by the Missouri wildlife and forestry law nor by any regulation of the Missouri Conservation Commission. Other federal laws such as the Clean Water Act and the Endangered Species Act, and state or local laws need to be considered for construction and development projects, and require permits and/or consultation with the appropriate agency. Following the recommendations provided in this document will help reduce and avoid project impacts to the species, but impacts may still occur. Please contact the appropriate agency for further coordination and to complete compliance requirements.